PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	Release by Secured Party (Second Lien)

CONVEYING PARTY DATA

Name	Execution Date
Morgan Stanley Senior Funding, Inc.	09/24/2012

RECEIVING PARTY DATA

Name:	Alkermes, Inc.
Street Address:	852 Winter Street
City:	Waltham
State/Country:	MASSACHUSETTS
Postal Code:	02451

Name:	Alkermes Pharma Ireland Limited	
Street Address:	Monskland	l
City:	Athlone Co. Westmeath	
State/Country:	IRELAND	l

Name:	Alkermes Controlled Therapeutics Inc.
Street Address:	852 Winter Street
City:	Waltham
State/Country:	MASSACHUSETTS
Postal Code:	02451

PROPERTY NUMBERS Total: 414

Property Type	Number
Patent Number:	5688801
Patent Number:	5965168
Patent Number:	6110921
Patent Number:	6368632
Patent Number:	6544559
Patent Number:	6803055

Patent Number:	7118763
Patent Number:	7547452
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Patent Number:	5358483
Patent Number:	5372579

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 212-225-2415

Email: dilan@cgsh.com

Correspondent Name: Daniel llan

Address Line 1: One Liberty Plaza c/o Cleary Gottlieb

Address Line 4: New York, NEW YORK 10006

NAME OF SUBMITTER:	Megan St. Ledger
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 39

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TERMINATION AND RELEASE OF SECURITY INTEREST IN PATENTS

This Termination and Release of Security Interest in Patents (this "Release") is granted on this 24th day of September, 2012, by Morgan Stanley Senior Funding, Inc. ("Morgan Stanley"), as collateral agent for the Secured Parties under the security agreements referenced below, in favor of Alkermes, Inc., a corporation organized under the laws of the Commonwealth of Pennsylvania, located at 852 Winter Street, Waltham, Massachusetts; Alkermes Pharma Ireland Limited, a private limited company organized under the laws of the Republic of Ireland (registered number 448848), located at Monksland, Athlone Co. Westmeath, Ireland; and Alkermes Controlled Therapeutics Inc., a corporation organized under the laws of the Commonwealth of Pennsylvania, located at 852 Winter Street, Waltham, Massachusetts (together, "Alkermes" or the "Borrowers"), with respect to the Patents (as defined below).

$\underline{\mathbf{W}} \underline{\mathbf{I}} \underline{\mathbf{T}} \underline{\mathbf{N}} \underline{\mathbf{E}} \underline{\mathbf{S}} \underline{\mathbf{E}} \underline{\mathbf{T}} \underline{\mathbf{H}} :$

WHEREAS, the Borrowers and Morgan Stanley are party to a Second Lien Guarantee and Collateral Agreement dated as of September 16, 2011, in favor of Morgan Stanley;

WHEREAS, pursuant to the Second Lien Guarantee and Collateral Agreement, on September 16, 2011, Morgan Stanley, as collateral agent, and Borrowers entered into a Patent Security Agreement, which was recorded with the U.S. Patent and Trademark Office (the "USPTO") on September 29, 2011, at Reel/Frame 026994/0245 (the "2011 Patent Security Agreement");

WHEREAS, pursuant to the 2011 Patent Security Agreement, Morgan Stanley received a security interest in all of Borrowers' rights, titles and interests in the United States and throughout the world in the Patent Collateral (as this term is defined in the 2011 Patent Security Agreement), including, without limitation, those patents and patent applications set forth on Schedules A and B hereto; and

WHEREAS, Morgan Stanley desires to release any and all security interests, and any other lien, it has in the Patent Collateral to Alkermes.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Morgan Stanley hereby agrees as follows:

1. Morgan Stanley hereby releases, terminates and discharges, without representation, recourse or warranty whatsoever, each security interest in the Patent Collateral that was granted to Morgan Stanley under the 2011 Patent Security Agreement. Morgan Stanley acknowledges and agrees that the 2011 Patent Security Agreement has been terminated.

- 2. The parties hereto authorize and request that (i) with respect to the Patent Collateral listed on Schedule A, the Director of Patents and Trademarks of the United States of America and (ii) with respect to the Patent Collateral listed on Schedule B, the appropriate officer in the Republic of Ireland, record this Release against the Patent Collateral. Morgan Stanley agrees to perform, at the Borrowers' expense, all further acts and execute and deliver all further documents and/or instruments that may be reasonably necessary to carry out the provisions of this Release.
- 3. This Release shall be governed by and construed in accordance with the law of the State of New York.
- 4. This Release shall be binding upon Morgan Stanley's representatives, successors, assigns and transferees.

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IN WITNESS WHEREOF, the undersigned has caused this Release to be executed by its duly authorized representatives as of the date first above written.

STATE OF	Ma	Ym	<u>//</u>
COUNTY	OF DE	w H	43

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On this th day of 2012, before me, the undersigned, a notary public in and for said state and county, personally appeared _______, personally known to me (or proved to me on the basis of satisfactory evidence), to be the individual who executed the foregoing instrument on behalf of _______ as the ______ of such company and acknowledged to me that the execution and delivery of said instrument was duly authorized by said company.

) -----

Notary Public

(Affix Seal Below)

Maria A FLOYO

No only Public - Store of New York
NO 01544134780

Qualified in New York County
Commission Expres Outdoor 3, 2013

SCHEDULE A

ASSIGNMENT REEL FRAME: 026994/0245

Case #: 000166.0051

Title: MICROENCAPSULATED 3-PIPERIDINYL-SUBSTITUTED 1,2-BENZISOXAZOLES AND 1,2-BENZISOTHIAZOLES

Owner: ALKERMES, INC. and JANSSEN PHARMACEUTICA

Country	Sub Case	Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	01	DIV	Granted	08/403,432	14-Mar-1995	5,688,801	18-Nov-1997	18-Nov-2014
US	03	CON	Granted	09/005,549	12-Jan-1998	5,965,168	12-Oct-1999	19-Nov-2013
US	04	CON	Granted	09/252,486	18-Feb-1999	6,110,921	29-Aug-2000	19-Nov-2013
US	05	CON	Granted	09/578,908	26-May-2000	6,368,632	09-Apr-2002	19-Nov-2013
US	06	DIV	Granted	10/058,072	29-Jan-2002	6,544,559	08-Apr-2003	19-Nov-2013
US	07	DIV	Granted	10/359,226	06-Feb-2003	6,803,055	12-Oct-2004	19-Nov-2013
US	08	DIV	Granted	10/920,422	18-Aug-2004	7,118,763	10-Oct-2006	19-Nov-2013
US	11	REX	Granted	90/007,907	26-Jan-2006	5,688,801	18-Nov-1997	18-Nov-2014
US	12	REX	Granted	90/008,151	28-Aug-2006	6,368,632	23-Oct-2007	19-Nov-2013
US	13	REX	Granted	90/008,212	12-Sep-2006	6,110,921	04-Mar-2008	19-Nov-2013
US	14	REX	Granted	90/008,216	12-Sep-2006	5,965,168	22-Apr-2008	19-Nov-2013
US	16	CON	Granted	11/826,384	13-Jul-2007	7,547,452	16-Jun-2009	19-Nov-2013

Case #: 000166.0053

Title: PREPARATION OF BIODEGRADABLE MICROPARTICLES CONTAINING A BIOLOGICALLY ACTIVE AGENT

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent#	Issue Date	Expiration Date
US	00	CON	Granted	08/725,439	03-Oct-1996	5,650,173	22-Jul-1997	19-Nov-2013
US	01	CON	Granted	08/729,277	10-Oct-1996	5,654,008	05-Aug-1997	19-Nov-2013

Case #: 000166.0063

Title: PREPARATION OF EXTENDED SHELF-LIFE BIODEGRADABLE, BIOCOMPATIBLE MICROPARTICLES CONTAINING A BIOLOGICALLY ACTIVE AGENT

Owner: ALKERMES, INC. and JANSSEN PHARMACEUTICA

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	02	ORD	Granted	08/850,679	02-May-1997	5,792,477	11-Aug-1998	02-May-2017
US	03*	CON	Granted	09/071,865	04-May-1998	5,916,598	29-Jun-1999	02-May-2017
US	04*	CON	Granted	09/263,098	05-Mar-1999	6,110,503	29-Aug-2000	02-May-2017
US	05*	CON	Granted	09/578,717	26-May-2000	6,290,983	18-Sep-2001	02-May-2017
US	06*	CON	Granted	09/920,862	03-Aug-2001	6,403,114	11-Jun-2002	02-May-2017
US	11*	REX	Granted	90/007,587	15-Jun-2005	6,110,503	02-Feb-2010	02-May-2017
US	12	REX	Granted	90/008,093	26-Jun-2006	5,792,477	13-Jul-2010	02-May-2017

NOTE: The assignment in cases noted (*) denote Alkermes, Inc. ownership only. Other cases without note, including all ex-US patents and applications, are co-owned by Alkermes and Janssen Pharmaceutica.

Case #: 000166.0070

Title: METHOD FOR PREPARING MICROPARTICLES HAVING A SELECTED RELEASE PROFILE

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	01	ORD	Granted	09/223,276	30-Dec-1998	6,194,006	27-Feb-2001	30-Dec-2018
US	02	CON	Granted	09/722,335	28-Nov-2000	6,379,703	30-Apr-2002	30-Dec-2018
US	03	CON	Granted	10/059,115	31-Jan-2002	6,596,316	22-Jul-2003	30-Dec-2018

Case #: 000166.0073

Title: PREPARATION OF INJECTABLE SUSPENSIONS HAVING IMPROVED INJECTABILITY

Owner: ALKERMES PHARMA IRELAND LIMITED AND ALKERMES CONTROLLED THERAPEUTICS, INC. 1

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	00	ORD	Granted	09/577,875	25-May-2000	6,495,164	17-Dec-2002	25-May-2020
US	01	CON	Granted	10/259,949	30-Sep-2002	6,667,061	23-Dec-2003	25-May-2020
US	02	DIV	Granted	10/681,142	09-Oct-2003	7,371,406	13-May-2008	25-May-2020
US	03	CON	Granted	11/826,994	19-Jul-2007	7,799,345	21-Sep-2010	25-May-2020
US	05	CON	Published	12/856,198	13-Aug-2010		-	

Case #: 000166.0075

Title: APPARATUS AND METHOD FOR PREPARING MICROPARTICLES

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	00	ORD	Granted	09/438,659	12-Nov-1999	6,331,317	18-Dec-2001	12-Nov-2019
US	01	CON	Granted	09/828,849	10-Apr-2001	6,395,304	28-May-2002	12-Nov-2019
US	02	CON	Granted	10/109,641	01-Apr-2002	6,537,586	25-Mar-2003	12-Nov-2019
US	03	CON	Granted	10/355,061	31-Jan-2003	6,713,090	30-Mar-2004	12-Nov-2019
US	04	CON	Granted	10/713,039	17-Nov-2003	6,861,016	01-Mar-2005	12-Nov-2019

¹ Recordation in the relevant patent office(s) to reflect ownership interest held by Alkermes Pharma Ireland Limited will occur after Close.

Case #: 000166.0077

Title: PROCESS FOR ADJUSTING POLYMER MOLECULAR WEIGHT POLYMER MICROPARTICLES

Owner: ALKERMES, INC.

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	00	ORD	Granted	09/575,075	19-May-2000	6,264,987	24-Jul-2001	19-May-2020
US	01	CON	Granted	09/870,751	01-Jun-2001	6,379,704	30-Apr-2002	19-May-2020
US	02	CON	Granted	10/073,864	14-Feb-2002	6,534,092	18-Mar-2003	19-May-2020
US	00	ORD	Granted	09/671,426	27-Sep-2000	6,471,995	29-Oct-2002	27-Sep-2020
US	01	DIV	Granted	10/235,534	06-Sep-2002	6,830,737	14-Dec-2004	27-Sep-2020
US	02	CON	Granted	10/821,941	12-Apr-2004	6,884,372	26-Apr-2005	27-Sep-2020

Case #: 000166.0098

Title: APPARATUS AND METHOD FOR PREPARING MICROPARTICLES USING IN-LINE SOLVENT EXTRACTION

Owner: ALKERMES, INC.

Country	Sub Case	Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	00	ORD	Granted	09/438,656	12-Nov-1999	6,495,166	17-Dec-2002	12-Nov-2019
US	01	DIV	Granted	09/930,450	16-Aug-2001	6,540,393	01-Apr-2003	12-Nov-2019
US	02	CON	Granted	10/319,845	16-Dec-2002	6,705,757	16-Mar-2004	12-Nov-2019
US	03	CON	Granted	10/729,909	09-Dec-2003	6,939,033	06-Sep-2005	12-Nov-2019
US	04	CON	Granted	11/158,078	22-Jun-2005	7,300,671	27-Nov-2007	12-Nov-2019
US	05	CON	Granted	11/826,533	16-Jul-2007	7,510,730	31-Mar-2009	12-Nov-2019

Case #: 000166.0106

Title: ACID END GROUP POLY(D,L-LACTIDE-CO-GLYCOLIDE) COPOLYMERS WITH HIGH GLYCOLIDE CONTENT

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	00	ORD	Granted	09/635,677	10-Aug-2000	6,362,308	26-Mar-2002	10-Aug-2020
US	01	DIV	Granted	10/060,235	01-Feb-2002	6,703,477	09-Mar-2004	10-Aug-2020
US	02	CON	Granted	10/724,107	01-Dec-2003	7,074,883	11-Jul-2006	10-Aug-2020

Case #: 000166.0108

Title: METHOD FOR IMPROVING MICROSPHERE FLOWABILITY CHARACTERISTICS

Owner: ALKERMES, INC.

Country Sub Case Case Type Status Application # Filing Date Patent # Issue Date **Expiration Date** 26-Jan-2023 US CIP Granted 10/022,859 20-Dec-2001 7,247,319 24-Jul-2007

Case #: 000166.0112

Title: RESIDUAL SOLVENT EXTRACTION METHOD AND MICROPARTICLES PRODUCED THEREBY

Owner: ALKERMES PHARMA IRELAND LIMITED²

Country	Sub Ca	nse Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	00	ORD	Granted	09/942,631	31-Aug-2001	6,824,822	30-Nov-2004	31-Aug-2021
US	02	CON	Granted	11/312,371	21-Dec-2005	7,223,440	29-May-2007	31-Aug-2021
US	03	CON	Granted	11/785,638	19-Apr-2007	7,524,530	28-Apr-2009	31-Aug-2021
US	06	CON	Granted	12/382,637	20-Mar-2009	7,875,310	25-Jan-2011	31-Aug-2021
US	07	CON	Published	12/967,757	14-Dec-2010			-

Case #: 000166.0118

Title: CROSSLINKED HYDROGEL COPOLYMERS

Owner: ALKERMES, INC.

Country	Sub Case	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	00	ORD	Granted	10/273,365	18-Oct-2002	6,800,663	05-Oct-2004	18-Oct-2022

Case #: 000166.0119

Title: METHOD AND APPARATUS FOR FILTERING AND DRYING A PRODUCT

Owner: ALKERMES, INC.

Country Sub Case Case Type Status Application # Filing Date Patent # Issue Date **Expiration Date** US ORD Granted 10/304,058 26-Nov-2002 7,089,681 15-Aug-2006 26-Nov-2022

² Recordation in the relevant patent office(s) to reflect ownership interest held by Alkermes Pharma Ireland Limited will occur after Close.

Case #: 000166.0127

Title: COACERVATION PROCESS

Owner: ALKERMES, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1	ORD	Pending	12/051,395	19-Mar-2008			

Case #: 000166.0129

Title: QUENCH LIQUIDS AND WASHING SYSTEMS FOR PRODUCTION MICROPARTICLES

Owner: ALKERMES, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	ORD	Pending	12/140,542	17-Jun-2008			

Case #: 000166.0138

Title: INJECTABLE FORMULATION OF ENTECAVIR FOR TREATMENT OF HEPATITIS B

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	PRO	Pending	61/529,705	31-Aug-2011			

Case #: 000166.2025

Title: MICROENCAPSULATION AND SUSTAINED RELEASE OF BIOLOGICALLY ACTIVE POLYPEPTIDES

Owner: ALKERMES PHARMA IRELAND LIMITED³

Country	Sub C	ase Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	01	ORD	Granted	10/688,786	17-Oct-2003	7,164,005	16-Jan-2007	17-Oct-2023
US	02	ORD	Granted	10/688,059	17-Oct-2003	7,462,365	09-Dec-2008	06-Feb-2025
US	04	CON	Published	12/289.857	06-Nov-2008			

³ Recordation in the relevant patent office(s) to reflect ownership interest held by Alkermes Pharma Ireland Limited will occur after Close.

Case #: 000166.2056

Title: POLYMER-BASED SUSTAINED RELEASE DEVICE

 $\textit{Owner:}\;\; \text{ALKERMES PHARMA IRELAND LIMITED}^4 \text{ and AMYLIN PHARMACEUTICALS, INC.}\;\;$

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	01*	RCE	Granted	11/104,877	13-Apr-2005	7,456,254	25-Nov-2008	30-Jun-2025
US	03*	PCT	Pending	10/592,769	14-Sep-2006			15-Apr-2024
US	04	DIV	Granted	11/521,091	14-Sep-2006	7,563,871	21-Jul-2009	15-Apr-2024
US	09*	CON	Granted	11/826,535	16-Jul-2007	7,612,176	03-Nov-2009	13-Apr-2025
US	12	ORD	Published	11/578,712	23-Jan-2008			•
US	14	CON	Published	12/483,871	12-Jun-2009			
US	15*	CON	Published	12/585,574	17-Sep-2009			
US	16*	CON	Published	12/713,036	25-Feb-2010			

NOTE: The assignment in cases noted (*) denote Alkermes, Inc. as the assignee. All other US cases are assigned to both Alkermes, Inc. and Amylin Pharmaceuticals, Inc.

⁴ Recordation in the relevant patent office(s) to reflect ownership interest held by Alkermes Pharma Ireland Limited will occur after Close.

Case #: 4000.3000

Title: Polymorphic Forms of Naltrexone

Owner: ALKERMES, INC.

Country	Sub Case	Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1	ORD	Granted	10/860,608	03-Jun-2004	7,279,579	09-Oct-2007	07-May-2026
US	2	DIV	Published	11/860,677	25-Sep-2007			

Case #: 4000.3002

Title: Methods for Administering Active Agent to CYP3A4 Sensitive Patients

Owner: ALKERMES, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1	ORD	Published	12/241,404	30-Sep-2008			

Case #: 4000.3003

Title: Aripiprazole, Olanzapine and Haloperidol Pamoate Salts

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	ORD	Granted	10/635,232	06-Aug-2003	6,987,111	17-Jan-2006	10-May-2024

Case #: 4000.3005

Title: Methods for Administering Aripiprazole

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1	CON	Pending	12/251.656	15-Oct-2008			

Case #: 4000.3010

Title: Naltrexone Long Acting Formulations and Methods of Use

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US US	1 2	ORD DIV	Granted Published	11/083,167 13/037,713	17-Mar-2005 01-Mar-2011	7,919,499	05-Apr-2011	15-Oct-2029

Case #: 4000.3022

Title: Selective Opioid Compounds *Owner:* ALKERMES, INC.

CountrySub Case TypeStatusApplication #Filing DatePatent #Issue DateExpiration DateUS2ORDPublished12/371,33413-Feb-2009

Case #: 4000.3027

Title: Morphinan Derivatives with High Oral Bioavailability

Owner: ALKERMES, INC.

Country Sub Case Case Type Status Application # Filing Date Patent # Issue Date Expiration Date

US 1 ORD Published 12/727,784 19-Mar-2010

Case #: 4000.3028

Title: Heterocyclic Compounds for the Treatment of Neurological and Psychological Disorders

Owner: ALKERMES, INC.

CountrySub Case Case TypeStatusApplication #Filing DatePatent #Issue DateExpiration DateUS2ORDPublished12/823,00724-Jun-2010

Case #: 4000.3030
Title: Asenapine Prodrugs

Owner: ALKERMES, INC.

Country	Sub Case	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1	ORD	Pending	12/978,298	23-Dec-2010			

Case #: 4000.3031

Title: Quaternary Ammonium Salt Prodrugs

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1	ORD	Published	12/978,178	23-Dec-2010			

Case #: 4000.3033

Title: Prodrugs NH-Acidic Compounds

Owner: ALKERMES, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1 A	ORD	Published	12/823,102	24-Jun-2010			

Case #: 4000.3034

Title: Prodrugs Heteraromatic Compounds

Owner: ALKERMES, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1	ORD	Pending	12/978.273	23-Dec-2010			

Case #: 4000.3035

Title: Prodrugs for the Treatment of Schizophrenia and Bipolar Disease

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	1 ORD	Published	12/978,274	23-Dec-2010			

Case #: 4000.3036

Title: Diaryldiazepine Prodrugs for the Treatment of Neurological and Psychological Disorders

Owner: ALKERMES, INC.

CountrySub Case Case TypeStatusApplication #Filing DatePatent #Issue DateExpiration DateUS1ORDPublished12/978,24023-Dec-2010

Case #: 4000.3038

Title: Morphinan Derivatives for the Treatment of Drug Overdose

Owner: ALKERMES, INC.

CountrySub Case TypeStatusApplication #Filing DatePatent #Issue DateExpiration DateUS1ORDPublished12/903,46213-Oct-2010

Case #: 4000.3039

Title: Process for Synthesizing Oxidized Lactam Compounds

Owner: ALKERMES, INC.

Country Sub Case Case Type Status Application # Filing Date Patent # Issue Date Expiration Date US 1 ORD Pending 13/100,515 04-May-2011

Case #: 4000.3041

Title: Process for the Synthesis Substituted Morphinans

Owner: ALKERMES, INC.

CountrySub Case Case TypeStatusApplication #Filing DatePatent #Issue DateExpiration DateUS1ORDPending13/096,67928-Apr-2011

Case #: 4000.3042

Title: Prodrugs NH-Acidic Compounds: Carbonate, Carbamate and Phosphonate Derivatives

Owner: ALKERMES, INC.

CountrySub Case Case TypeStatusApplication #Filing DatePatent #Issue DateExpiration DateUS1ORDPending13/168,49724-Jun-2011

Case #: 4000.3043

Title: Methods for Treating Antipsychotic-Induced Weight Gain

Owner: ALKERMES, INC.

 Country
 Sub Case Case Type
 Status
 Application #
 Filing Date
 Patent #
 Issue Date
 Expiration Date

 US
 1
 ORD
 Pending
 13/215,718
 23-Aug-2011
 23-Aug-2031

Case #: 4000.3044

Title: Multi-API Loading Prodrugs *Owner:* ALKERMES, INC.

 Country
 Sub Case Case Type
 Status
 Application #
 Filing Date
 Patent #
 Issue Date
 Expiration Date

 US
 PRO
 Pending
 61/427,026
 23-Dec-2010
 23-Dec-2011

Case #: 4000.3047

Title: Peripherally Acting Mu Opioid Antagonists

Owner: ALKERMES, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	PRO	Pending	61/442,629	14-Feb-2011			14-Feb-2012

Case #: 4000.3048

Title: Process for the Synthesis of Quaternary Amine Compounds

Owner: ALKERMES, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	PRO	Pending	61/472,016	05-Apr-2011			05-Apr-2012

Case #: 4000.3051

Title: Crystalline Salt Forms of an Opioid Modulator

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	PRO	Pending	61/495,203	09-Jun-2011			09-Jun-2012

Case #: 4000.3052

Title: Peripherally Acting Opioid Compounds

Owner: ALKERMES, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	PRO	Pending	61/502 721	29-Jun-2011			

Case #: 4000.3054

Title: Prodrugs of Nucleoside Analogs

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	PRO	Pending	61/527,986	26-Aug-2011			

Case #: 513352

Title: Formulations Having Improved Site Reactions

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	PRO	Pending	61/454.008	18-Mar-2011			18-Mar-2012

Case #: 1733.1002

Title: Composition for Sustained Release Human Growth Hormone *Owner:* ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	4	CON	Granted	09/505,508	17-Feb-2000	6,500,448	31-Dec-2002	02-Dec-2012

Case #: 1733.1004

Title: Composition and Method for the Controlled Release Metal Cation-Stabilized Interferon

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US US US	001 014	ORD CON CON	Granted Granted Granted	08/279,784 08/765,558 10/092,365	25-Jul-1994 07-Mar-1997 06-Mar-2002	5,711,968 6,165,508 6,780,434	27-Jan-1998 26-Dec-2000 24-Aug-2004	27-Jan-2015 26-Dec-2017 25-Jul-2014

Case #: 1733.1009

Title: Production Scale Method Forming Microparticles

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US US US US US	021 022 023 041	ORD CON CON CON CON	Granted Granted Granted Granted ⁵ Granted	08/443,726 09/305,413 09/587,821 10/006,991 10/784,474	18-May-1995 05-May-1999 06-Jun-2000 06-Dec-2001 23-Feb-2004	5,922,253 6,153,129 6,358,443 6,726,860 7,037,450	13-Jul-1999 28-Nov-2000 19-Mar-2002 27-Apr-2004 02-May-2006	13-Jul-2016 18-May-2015 18-May-2015 13-Jul-2015 06-Dec-2021

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 $^{^{\}rm 5}$ Note: The Company has decided to abandon this registration

Case #: 1733.1015

Title: Method for Fabricating Polymer-Based Controlled-Release Devices

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	007	ORD	Granted	08/649,128	14-May-1996	5,817,343	06-Oct-1998	14-May-2016
US		CIP	Granted	08/779,777	07-Jan-1997	6,183,781	06-Feb-2001	14-May-2016

Case #: 1733.1016

Title: Composition and Method Using Solid-Phase Particles for Sustained In Vivo Release a Biologically Active Agent

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	001	ORD	Granted	08/705,197	29-Aug-1996	5,916,597	29-Jun-1999	29-Aug-2016

Case #: 1733.1018

Title: Device for the Sustained Release Aggregation-Stabilized Biologically Active Agent

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	008	CON	Granted	08/934,830	22-Sep-1997	6,514,533	04-Feb-2003	31-Aug-2015
US	011	CON	Granted	09/820,587	29-Mar-2001	6,555,525	29-Apr-2003	31-Aug-2015

Case #: 1733.1044

Title: A Method for Purifying Human Growth Hormone

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	ORD	Granted	09/260,362	01-Mar-1999	6,451,347	17-Sep-2002	01-Mar-2019

Case #: 1733.1045

Title: Method for Producing Submicron Particles a Labile Agent and Use There

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	007	ORD	Granted	09/321,091	28-May-1999	6,444,223	03-Sep-2002	28-May-2019
US		CON	Granted	10/200,057	18-Jul-2002	6,713,087	30-Mar-2004	28-May-2019

Case #: 1733.1051

Title: Method for Producing Sub-Micron Particles Biologically Active Agents and Uses There

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	003	ORD	Granted	09/422,751	21-Oct-1999	6,284,283	04-Sep-2001	21-Oct-2019
US		CON	Granted	09/898,524	03-Jul-2001	6,428,815	06-Aug-2002	21-Oct-2019

Case #: 1733.1055

Title: Microencapsulation and Sustained Release Biologically Active Acid-Stable or Free Sulfhydryl-Containing Proteins

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	ORD	Granted	09/501,934	10-Feb-2000	6,465,425	15-Oct-2002	10-Feb-2020

Case #: 1733.1056

Title: Process for the Preparation of Polymer-Based Sustained Release Compositions

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC. AND ALKERMES PHARMA IRELAND LIMITED⁶

Country	Sub Case Cas	e Type Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	001 CO	N Granted	09/801,272	07-Mar-2001	6,479,065	12-Nov-2002	10-Aug-2020

⁶ Recordation in the relevant patent office(s) to reflect ownership interest held by Alkermes Pharma Ireland Limited will occur after Close.

Case #: 1733.1057

Title: Method and Apparatus for Uniform Sorbate Equilibration Solid Samples

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	ORD	Granted	09/507,238	18-Feb-2000	6,499,361	31-Dec-2002	18-Feb-2020

Case #: 1733.1062

Title: Methods and Compositions for the Targeted Delivery of Biologically Active Agents

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	003	CON	Granted	10/342,448	14-Jan-2003	7,097,857	29-Aug-2006	20-Mar-2021

Case #: 1733.1068

Title: Method of Modifying the Release Profile Sustained Release Compositions

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	008	CON	Granted	10/758,717	16-Jan-2004	7,074,432	11-Jul-2006	25-Mar-2023

Case #: 1733.1070

Title: Process for Producing Small Particles Biologically Active Molecules

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	017	FWC	Granted	08/006,682	21-Jan-1993	6,569,458	27-May-2003	27-May-2020

Case #: 1733.2012

Title: Method of Preparing Sustained Release Microparticles *Owner:* ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	001	ORD	Granted	10/762,220	21-Jan-2004	7,658,998	09-Feb-2010	13-Oct-2027

Case #: 1733.2040

Title: Method of Modifying the Release Profile Sustained Release Compositions

Owner: ALKERMES CONTROLLED THERAPEUTICS, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	CON	Pending ⁷	11/826,694	17-July-2007			

Case #: 0947.1044-031

Title: Increasing Blood-Brain Barrier Permeability with Permeabilizer Peptides

Owner: ALKERMES, INC.

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
US	DIV	Granted	08/121,058	13-Sep-1993	5,506,206	09-Apr-1996	09-Apr-2013

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 $^{^{\}rm 7}$ Note: The Company has decided to abandon this application

Country	Status	Patent	Application Numbe	r Publication Number	Filing Date		Normal Expiry	Owner	Short Title / Subject Matter
USA	Granted	Number 5260478	07/986,646		08-Dec-1992	Date 09-Nov-1993	Date DR-Dec-2012 Alker	rmes Pharma Ireland Limiter	IODINATED AROY_OXY CARBOXAMIDES
USA	Granted	5264610	08/038,371		29-Mar-1993	23-Nov-1993		rmes Pharma Ireland Limited	IODINATED AROMATIC PROPANEDIOATES
USA	Granted	5328404	08/148,112		04-Nov-1993	12-Jul-1994		rmes Pharma Ireland Limited	METHOD OF X-RAY IMAGING USING IODINATED AROMATIC PROPANEDIATES
USA	Granted	5298262	07/987,904		04-Dec-1992	29-Mar-1994		rmes Pharma Ireland Limited	USE OF IONIC CLOUD POINT MODIFIERS TO PREVENT PARTICLE AGGREGATION DURING STERILIZATION
USA USA	Granted Granted	5302401 5451393	07/987,879 08/207,533		09-Dec-1992 07-Mar-1994	12-Apr-1994 19-Sep-1995		rmes Pharma Ireland Limited rmes Pharma Ireland Limited	METHOD TO REDUCE PARTICLE SIZE GROWTH DURING LYOPHILIZATION X-RAY CONTRAST COMPOSITIONS USEFUL IN MEDICAL IMAGING
USA	Granted	5322679	07/990,987		16-Dec-1992	21-cun-1994		rmes Pharma Ireland Limited	IODINATED AROY LOXY ESTERS
USA	Granted	5466433	08/261,794		20-Jun-1994	14-Nov-1995	16-Dec-2012 Alkei	rmes Pharma Ireland Limitec	IODINATED AROY LOXY ESTERS
USA	Granted	5326552	07/991,909		17-Dec-1992	05-Jul-1994		rmes Pharma Ireland Limited	FORMULATIONS FOR NANOPARTICULATE X-RAY BLOOD POOL CONTRAST AGENTS USING HIGH
USA USA	Granted Granted	5447710 5330739	08/242,492 07/985,415		13-May-1994 04-Dec-1992	05-Sep-1995 19-Jul-1994		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	METHOD OF MAKING NANOPARTICULATE X-RAY BLOOD POOL CONTRAST AGENTS USING HIGH IODINATED BENZOYL ACETALS AND KETALS FOR X-RAY IMAGING
USA	Granted	5470583	08/240,309		10-May-1994	28-Nov-1995		rmes Pharma Ireland Limited	METHOD OF PREPARING NANOPARTICLE COMPOSITIONS CONTAINING CH ARGED PHOSPHOLIPIDS TO
USA	Granted	5346688	07/991,640				16-Dec-2012 Alkei	rmes Pharma Ireland Limited	NCD - Diagnostic Imaging
USA	Granted	5346702	07/985,424		04-Dec-1992	13-Sep-1994		rmes Pharma Ireland Limited	USE OF NON-IONIC CLOUD POINT MODIFIERS TO MINIMIZE NANOPARTICLE AGGREGATION DURING
USA USA	Granted Granted	5352459 5384107	07/991,639		16-Dec-1992 03-Aug-1994	04-Oct-1994 24-Jan-1995		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	USE OF PURIFIED SURFACE MODIFIERS TO PREVENT PARTICLE AGGREGATION DURING STERILIZATION IDDINATED AROMATIC COMPOUNDS
USA	Granted	54946B3	08/285,595 08/365,267		28-Dec-1994	27-Feb-1996		rmes Pharma Ireland Limited	SURFACE MODIFIED ANTICANCER NANOPARTICLES
USA	Granted	5401492	07/991,893		17-Dec-1992	28-Mar-1995		rmes Pharma Ireland Limited	WATER INSOLUBLE NON-MAGNETIC MANGANESE PARTICLES AS MAGNETIC RESONANCE CONTRACT
USA	Granted	5429824	07/990,874		15-Dec-1992	04-Jul-1995		rmes Pharma Ireland Limitec	USE OF TYLOXAPOL AS A NANOPARTICLE STABILIZER AND DISPERSANT
USA	Granted	5466440	08/367,407		30-Dec-1994	14-Nov-1995		rmes Pharma Ireland Limited	FORMULATIONS OF ORAL GASTROINTESTINAL DIAGNOSTIC X-RAY CONTRAST AGENTS IN COMBINATION
USA USA	Granted Granted	5643552 5472683	08/524,145 08/401,570		22-Aug-1995 09-Mar-1995	01-Jul-1997 05-Dec-1995		rmes Pharma Ireland Limited rmes Pharma Ireland Limited	NANOPARTICULATE DIAGNOSTIC MIXED CARBONIC ANHYDRIDES AS X-RAY CONTRAST AGENTS FOR NANOPARTICULATE DIAGNOSTIC MIXED CARBANIC ANHYDRIDES AS X-RAY CONTRAST AGENTS FOR
USA	Granted	5573749	08/401,397		09-Mar-1995	12-Nov-1996		rmes Pharma Ireland Limited	NANOPARTICULATE DIAGNOSTIC MIXED CARBOXYLIC ANHYDRIDES AS X-RAY CONTRAST AGENTS FOR
USA	Granted	5488133	08/209,181		10-Mar-1994	30-Jan-1996		rmes Pharma Ireland Limited	IODINATED AROYLOXY KETONES
USA	Granted	5500204	08/386,788		10-Feb-1995	19-Mar-1996		rmes Pharma Ireland Limited	NANOPARTICULATE DIAGNOSTIC DIMERS AS X-RAY CONTRAST AGENTS FOR BLOOD POOL AND
USA	Granted	5503723	08/385,531		08-Feb-1995	02-Apr-1996		rmes Pharma Ireland Limited	ISOLATION OF ULTRA SMALL PARTICLES
USA USA	Granted Granted	5510118 5518187	08/388,092 08/180,827		14-Feb-1995 12-Jan-1994	23-Apr-1996 21-May-1996		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	PROCESS OF PREPARING THERAPEUTIC COMPOSITIONS CONTAINING NANOPARTICLES METHOD OF GRINDING PHARMACEUTICAL SUBSTANCES
USA	Granted	5518738	08/385,614		09-Feb-1995	21-May-1996		rmes Pharma Ireland Limited	NANOPARTICULATE NSAID COMPOSITIONS
USA	Granted	5521218	08/440,794		15-May-1995	2B-May-1996	15-May-2015 Alker	rmes Pharma Ireland Limited	NANOPARTICULATE IODIPAMIDE DERIVATIVES FOR USE AS X-RAY CON TRAST AGENTS
USA	Granted	5525328	08/265,550		24-Jun-1994	11-Jun-1996		rmes Pharma Ireland Limited	NANOPARTICULATE DIAGNOSTIC DIATRIZOXY ESTER X-RAY CONTRAST AGENTS FOR BLOOD POOL AND
USA USA	Granted	5534270	08/386,028		09-Feb-1995 14-Feb-1995	09-Jul-1996 06-Aug-1996		rmes Pharma Ireland Limited	METHOD OF PREPARING STABLE DRUG NANOPARTICLES
USA	Granted Granted	5543133 5571536	08/388,099 08/384,057		06-Feb-1995	05-Nov-1996		rmes Pharma Ireland Limited rmes Pharma Ireland Limited	PROCESS OF PREPARING X-RAY CONTRAST COMPOSITIONS CONTAINING NANOPARTIC LES FORMULATIONS OF COMPOUNDS AS NANOPARTICULATE DISPERSIONS IN DIGESTIBLE OILS OR FATTY
USA	Granted	5560931	08/388,088		14-Feb-1995	01-Oct-1996		rmes Pharma Ireland Limited	FORMULATIONS OF COMPOUNDS AS NANOPARTICULATE DISPERSIONS IN DIGESTIBLE OILS OR FATTY
USA	Granted	5560932	08/370,955		10-Jan-1995	01-Oct-1996		rmes Pharma Ireland Limited	MICROPRECIPITATION OF NANOPARTICULATE PHARMACEUTICAL AGENTS
USA	Granted	5565188	08/393,972		24-Feb-1995	15-Oct-1996		rmes Pharma Ireland Limiter	POLYALKYLENE 3_OCK COPO_YMERS AS SURFACE MODIFIERS FOR NANOPARTICLES
USA USA	Granted Granted	5705194 5569448	08/727,863 08/378,022		08-Oct-1996 24-Jan-1995	06-Jan-1998 29-Oct-1996		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	POLYALKYLENE 3.OCK COPOLYMERS AS SURFACE MODIFIERS FOR NANO PARTICLES SULFATED NONIONIC 3.OCK COPOLYMER SURFACTANTS AS STABILIZER COATINGS FOR NANOPARTICLE
USA	Granted	5573750	08/447,133		22-May-1995	12-Nov-1996		rmes Pharma Ireland Limited	DIAGNOSTIC IMAGING X-RAY CONTRAST AGENTS
USA	Granted	55737B3	08/387,651		13-Feb-1995	12-Nov-1996		rmes Pharma Ireland Limiter	REDISPERSIBLE NANOPARTICULATE FILM MATRICES WITH PROTECTIVE OVERCOATS
USA	Granted	5580579	08/388,878		15-Feb-1995	03-Dec-1996		rmes Pharma Ireland Limiter	SITE-SPECIFIC ADHESION WITHIN THE GLTRACT USING NANOPARTICLES STABILIZED BY HIGH
USA	Granted	5585108	08/366,518		30-Dec-1994	17-Dec-1996		rmes Pharma Ireland Limiter	FORMULATIONS OF ORA_GASTROINTESTINAL THERAPEUTIC AGENTS IN COMBINATION WITH
USA USA	Granted GRANTED	5587143 5591456	08/267,082 08/386,790		28-Jun-1994 10-Feb-1995	24-Dec-1996 07-Jan-1997		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	BUTYLENE OXIDE-ETHYLENE OXIDE BLOCK COPOLYMER SURFACTANTS AS STABILIZER COATINGS FOR MILLED NAPROXEN WITH HYDROXYPROPYL CELLULOSE AS A DISPERSION STABILIZER
USA	Granted	5593657	08/386,027		09-Feb-1995	14-Jan-1997		rmes Pharma Ireland Limited	NOVEL BARIUM SALT FORMULATIONS STABILIZED BY NON-IONIC AND ANIONIC STABILIZERS
USA	Granted	5603916	08/447,132		22-May-1995	18-Feb-1997		rmes Pharma Ireland Limited	35-BIS ALKANOYL AMINO-246-TRIIODOBENZYL ESTERS
USA	Granted	5622938	08/444,796		19-May-1995	22-Apr-1997		rmes Pharma Ireland Limited	SUGAR BASE SURFACTANT FOR NANOCRYSTALS
USA USA	Granted Granted	5628981 6,432,381 B2	08/366,841	US 2001-0006617 A1	30-Dec-1994	13-May-1997 13-Aug-2002		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	FORMULATIONS OF ORA_GASTROINTESTINAL DIAGNOSTIC X-RAY CONTRAST AGENTS AND ORA_ METHODS FOR TARGETING DRUG DELIVERY TO THE UPPER AND/OR LOWER GASTROINTESTINAL TRACT
USA	Published	0,432,301 D2	08/815,946 10/175,851	US 2003-0054045 A1		13-Aug-2002		rmes Pharma Ireland Limited	METHODS FOR TARGETING DRUG DELIVERY TO THE UPPER AND/OR LOWER GASTROINTESTINAL TRACT
USA	Granted	5662883	08/370,936	00 2000 000 10 10 111	10-Jan-1995	02-Sep-1997		rmes Pharma Ireland Limited	MICROPRECIPITATION OF MICRO-NANOPARTICULATE PHARMACEUTICAL AGENTS
USA	Granted	5665331	08/370,998		10√an-1995	09-Sep-1997		rmes Pharma Ireland Limited	CO-MICROPRECIPITATION OF NANOPARTICULATE PHARMACEUTICAL AGENTS WITH CRYSTAL GROWTH
USA	Granted	5668196	08/677,709		10-Jul-1996	16-Sep-1997		rmes Pharma Ireland Limited	NOVEL 3-AMIDO-TRIIODOPHENYL ESTERS AS X-RAY CONTRAST AGENTS
USA USA	Granted GRANTED	5670136 5716642	08/586,363 08/370,928		16√an-1996 10√an-1995	23-Sep-1997 10-Feb-1998		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	2,4,6-TRIIODO-5-SUBSTITUTED-AMINO-ISOPHTHALATE ESTERS USEFUL AS X-RAY CONTRAST AGENTS FOR MICROPRECIPITATION OF NANOPARTICULATE PHARMACEUTICAL AGENTS USING SURFACE ACTIVE
USA	GRANTED	5718388	08/249,787		25-May-1994			rmes Pharma Ireland Limited	CONTINUOUS METHOD OF GRINDING PHARMACEUTICAL SUBSTANCES
USA	Granted	5718919	08/393,648		25-May-1994	17-Feb-1998	17-Feb-2015 Alkei	rmes Pharma Ireland Limited	NANOPARTICLES CONTAINING THE RELENANTIONER OF IBUPROFEN
USA	Granted	5747001	08/393,973			05-May-1998		rmes Pharma Ireland Limiter	AEROSOLS CONTAINING 3ECLOMETHAZONE NANOPARTICLE DISPERSIONS
USA USA	Granted Granted	5834025 RE41,884 E	08/696,754 12/027,100		14-Aug-1996 06-Feb-2008	10-Nov-1998 26-Oct-2010		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	REDUCTION OF INTRAVENOUSLY ADMINISTERED NANOPARTICULATE-FORMULATION-INDUCED ADVERSE REDUCTION OF INTRAVENOUSLY ADMINISTERED NANOPARTICULATE-FORMULATION-INDUCED ADVERSE
USA	Granted	5862999	08/491,539		15-Jun-1995	26-can-1999		rmes Pharma Ireland Limited rmes Pharma Ireland Limited	METHOD OF GRINDING PHARMACEUTICAL SUBSTANCES
USA	Granted	5936030	08/836,819		14-Aug-1997	10-Aug-1999		rmes Pharma Ireland Limiter	POLYETHER COPOLYMERS AND A PROCESS FOR PREPARING THEM
USA	GRANTED	6045829	08/890,602		09-Jul-1997	04-Apr-2000		rmes Pharma Ireland Limiter	NANOCRYSTALLINE FORMULATIONS OF HUMAN IMMUNODEFICIENCY VIRUS (HIV) PROTEASE INHIBITORS
USA	Granted	6068858	09/225,493		06-can-1999	30-May-2000		rmes Pharma Ireland Limiter	METHODS OF MAKING NANOCRYSTALLINE FORMULATIONS OF HUMAN IMMUNODEFICIENCY VIRUS (HIV)
USA USA	Granted GRANTED	6221400 6153225	09/225,498 09/154,422		06-Jan-1999 13-Aug-1998	24-Apr-2001 28-Nov-2000		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	METHODS OF TREATING MAMMALS USING NANOCRYSTAL LINE FORMULATIONS OF HUMAN INJECTABLE FORMULATIONS OF NANOPARTICULATE NAPROXEN
USA	Granted	6165506	09/148,332		04-Sep-1998	26-Dec-2000		rmes Pharma Ireland Limited	NEW SOLID DOSE FORM OF NANOPARTICULATE NAPROXEN
USA	Granted	6264922	08/948,216		09-Oct-1997	24-Jul-2001		rmes Pharma Ireland Limited	NEBULIZED AEROSOLS CONTAINING NANOPARTICULATE DISPERSIONS
USA	Pending		09/577,489		22-May-2000			rmes Pharma Ireland Limited	METHODS OF ADMINISTRATING LIQUID DROPLET AEROSOLS OF NANOPARTICULATE DRUGS
USA	APPEAL	7 504 000 00	12/081,670	US 2008-0274044 A1		01 64-0000		rmes Pharma Ireland Limited	METHODS OF ADMINISTRATING LIQUID DROPLET AEROSOLS OF NANOPARTICULATE DRUGS
USA USA	Granted Granted	7,521,068 B2 6811767	09/190,138 09/597,738	US 2002-0102294 A1	12-Nov-1998 19-Jun-2000	21-Apr-2009 02-Nov-2004		rmes Pharma Ireland Limiter rmes Pharma Ireland Limiter	DRY POWDER AEROSOLS OF NANOPARTICULATE DRUGS LIQUID DROPLET AEROSOLS OF NANOPARTICULATE DRUGS
USA	Published	SOTTO	12/320,431	US 2009-0181100 A1		02 140¥ 200 4		rmes Pharma Ireland Limiter	LIQUID DROPLET AEROSOLS OF NANOPARTICULATE DRUGS
USA	GRANTED	6270806	09/261,151		03-Mar-1999	07-Aug-2001	03-Mar-2019 Alkei	rmes Pharma Ireland Limited	USE OF PEG-DERIVATIZED LIPIDS AS SURFACE STABILIZERS FOR NANOPARTICULATE COMPOSITIONS
USA	GRANTED	6267989	09/263,834		08-Mar-1999	31-Jul-2001		rmes Pharma Ireland Limiter	METHODS FOR PREVENTING CRYSTAL GROWTH AND PARTICLE AGGREGATION IN NANOPARTICULATE
USA USA	Granted Published	6656504	09/392,557	HC 2002-0012676 A1	09-Sep-1999 22- up-1999	02-Dec-2003		rmes Pharma Ireland Limited rmes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS COMPRISING AMORPHOUS CYCLOSPROINE AND METHODS OF CONTROLLED-RELEASE NANOPARTICULATE COMPOSITIONS
USA	APPEAL		09/337,675 11/979,231	US 2002-0012675 A1 US 2008-0124393 A1				rmes Pharma Ireland Limited rmes Pharma Ireland Limited	CONTROLLED-RE LEASE NANOPARTICULATE CLOZAPINE COMPOSITIONS CONTROLLED-RE LEASE NANOPARTICULATE CLOZAPINE COMPOSITIONS
USA	Published		12/483,188	US 2009-0297619 A1				rmes Pharma Ireland Limiter	NANOPARTICULATE ANTICONVULSANT AND IMMUNOSUPPRESSIVE COMPOSITIONS

Country	Status	Patent Number	Application Number	er Publication Number	Filing Date	Issue / Grant Date	Normal Expiry Date	Owner	Short Title / Subject Matter
USA	Pending		13/102,795		06-May-2001		01-Oct-2018	Alkermes Pharma Ireland Limited	CONTROLLED-RELEASE NANOPARTICULATE CLOZAPINE COMPOSITIONS
USA	Granted	6428814	09/414,159	US 2002-0068092 A1		06-Aug-2002		Alkermes Pharma Ireland Limited	BIOADHESIVE NANOPARTICULATE COMPOSITIONS HAVING CATIONIC SURFACE STABILIZERS
USA	Granted	7288267	10/004,808	US 2003-0108611 A1		30-Oct-2007	23-May-2021		BIOADHESIVE NANOPARTICULATE COMPOSITIONS HAVING CATIONIC SURFACE STABILIZERS
USA USA	Granted Granted	7850995 6431478	11/898,274 09/583,893	US 2008 0003295 A1	31-May-2000	14-Dec-2010 13-Aug-2002	26-cul-2019	Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	BIOADHESIVE NANOPARTICULATE COMPOSITIONS HAVING CATIONIC SURFACE STABILIZERS SMALL-SCALE MILL AND METHOD THEREOF
USA	Granted	6745962	10/037,586	US 2002-0145062 A1		08-Jun-2004		Alkermes Pharma Ireland Limited	SMALL-SCALE MILL AND METHOD THEREOF
USA	Granted	6991191	10/833,045	US 2004-0251332 A1		31-can-2006		Alkermes Pharma Ireland Limited	SMALL-SCALE MILL AND METHOD THEREOF
USA	Granted	6316029	09/572,961		18-May-2000	13-Nov-2001		Alkermes Pharma Ireland Limited	RAPIDLY DISINTEGRATING SOLID ORAL DOSAGE FORM
USA	Published		10/667,470	US 2004-0057993 A1	23-Sep-2003		18-May-2020	Alkermes Pharma Ireland Limited	RAPID_Y DISINTEGRATING SOLID ORAL DOSAGE FORM
USA	Published		12/068,706	US 2008-0213371 A1				Alkermes Pharma Ireland Limited	RAPID_Y DISINTEGRATING SOLID ORAL DOSAGE FORM
USA	Granted	6375986	09/666,539		21-Sep-2000	23-Apr-2002		Alkermes Pharma Ireland Limiter	SOLID DOSE NANOPARTICULATE COMPOSITIONS COMPRISING A SYNERGISTIC COMBINATION OF A
USA	Granted	6592903	10/075,443	US 2002-0110597 A1		15-Jul-2003		Alkermes Pharma Ireland Limited	SOLID DOSE NANOPARTICULATE COMPOSITIONS COMPRISING A SYNERGISTIC COMBINATION OF A
USA USA	Granted Granted	6969529 7244451	10/345,312 11/213,765	US 2003-0108616 A1 US 2007-0141159 A1		29-Nov-2005 17-Jul-2007	21-Sep-2020 05-Feb-2021	Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS COMPRISING COPOLYMERS OF VINYL PYRROLIDONE AND VINYL METHODS OF MAKING NANOPARTICULATE DRUG COMPOSITIONS COMPRISING COPOLYMERS OF VINYL
USA	Granted	6582285	09/842,619	US 2001-0053664 A1		24-Jun-2003	26-Apr-2021	Alkermes Pharma Ireland Limiter	APPARATUS FOR SANITARY WET MILLING
USA	APPEAL	COULLOS	10/246,751	US 2003-0095928 A1		E+ Gail E000		Alkermes Pharma Ireland Limiter	NANOPARTICULATE COMPOSITIONS OF INSULIN
USA	Granted	6742734	10/162,333	UŚ 2002-0179758 A1		01-Jun-2004		Alkermes Pharma Ireland Limited	SYSTEM AND METHOD FOR MILLING MATERIALS
USA	Granted	6976647	10/732,801	US 2004-0164194 A1	11-Dec-2003	20-Dec-2005	04-Jun-2022	Alkermes Pharma Ireland Limited	SYSTEM AND METHOD FOR MILLING MATERIALS
USA	Granted	7575184	11/833,645	US 2008-0025807 A1		18-Aug-2009		Alkermes Pharma Ireland Limited	SYSTEM AND METHOD FOR MILLING MATERIALS
USA	APPEAL		09/952,032	US 2003-0054042 A1				Alkermes Pharma Ireland Limiter	STABILIZATION OF CHEMICAL COMPOUNDS USING NANOPARTICULATE FORMULATIONS
USA	APPEAL		11/802,158	US 2007-0224279 A1				Alkermes Pharma Ireland Limiter	STABILIZATION OF CHEMICAL COMPOUNDS USING NANOPARTICULATE FORMULATIONS
USA USA	Pending Published		11/979,251 12/121,443	HC 9000 0175051 A1	31-Oct-2007		14-Sep-2021	Alkermes Pharma Ireland Limiter	STABILIZATION OF CHEMICAL COMPOUNDS USING NANOPARTICULATE FORMULATIONS NANOPARTICULATE COMPOSITIONS OF INMUNOCHIPPESSIVE AGENTS
USA	Published Granted	7459283	10/357,514	US 2009-0175951 A1 US 2003-0185869 A1		02-Dec-2008	14-Sep-2021 10-Jul-2026	Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS OF IMMUNOSUPPRESSIVE AGENTS NANOPARTICULATE COMPOSITIONS HAVING LYSOZYME AS A SURFACE STABILIZER
USA	Published	7400600	12/292,091	US 2009-0074875 A1		0E DC0 2000	04-Feb-2023	Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS HAVING LYSOZYME AS A SURFACE STABILIZER
USA	APPEAL		11/275,069	US 2006-0193920 A1			21-Sep-2020	Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS OF MAP KINASE INHIBITORS
USA	APPEAL		10/035,324	US 2003-0129242 A1			04-an-2022	Alkermes Pharma Ireland Limited	STERILE FILTERED NANOPARTICULATE FORMULATIONS OF BUDESONIDE AND BECLOMETHASONE
USA	Granted	7713551	10/659,706	US 2005-0031691 A1	11-Sep-2003	11-May-2010	12-Nov-2024	Alkermes Pharma Ireland Limited	GEL-STABILIZED NANOPARTICULATE ACTIVE AGENT COMPOSITIONS
USA	APPEAL		11/928,250	US 2008-0050461 A1			20-Mar-2023	Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS
USA	APPEAL		11/928,278	US 2008-0107741 A1				Alkermes Pharma Ireland Limiter	NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS
USA	APPEAL		11/928,289 12/076,247	US 2008-0226732 A1			20-Mar-2023		NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS
USA USA	Published Published		12/117,982	US 2008-0220075 A1 US 2008-0279949 A1			20-Mar-2023 20-Mar-2023	Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS
USA	Published		12/870,722	US 2010-0322852 A1			20-Mar-2023	Alkermes Pharma Ireland Limiter	NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS
USA	Published		12/870,745	US 2010- 0322853			20-Mar-2023	Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS
USA	Published		12/870,749	US 2010-0329976 A1			20-Mar-2023	Alkermes Pharma Ireland Limited	NANOPARTICULATE COMPOSITIONS OF ANGIOGENESIS INHIBITORS
USA	Granted	7101576	10/412,669	US 2003-0219490 A1	14-Apr-2003	05-Sep-2006	12-Apr-2024	Alkermes Pharma Ireland Limited	NANOPARTICULATE MEGESTROL FORMULATIONS
USA	Published		10/878,623	US 2005-0008707 A1			14-Apr-2023	Alkermes Pharma Ireland Limited	NANPARTICULATE MEGESTROL FORMULATIONS
USA	APPEAL		11/093,149	US 2005-0233001 A1			14-Apr-2023	Alkermes Pharma Ireland Limiter	NANPARTICULATE MEGESTROL FORMULATIONS
USA	APPEAL		11/472,556	US 2010-0226989 A1			14.0 0000	Alkermes Pharma Ireland Limited	NANOPARTICULATE MEGESTROL FORMULATIONS
USA USA	Published Granted	7276249	12/826,557 10/444,066	US 2010-0266705 A1 US 2005-0276974 A1		02-Oct-2007	14-Apr-2023 21-Feb-2023	Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE MEGESTROL FORMULATIONS NANOPARTICULATE FIBRATE FORMULATIONS
USA	Granted	7320802	10/692,855	US 2004-0058009 A1		22-Jan-2008	21-Feb-2023	Alkermes Pharma Ireland Limited	METHODS OF TREATMENT USING NANOPARTICULATE FENOFIBRATE COMPOSITIONS
USA	APPEAL	1020002	11/710,607	US 2007-0264348 A1		22 0.01 2000	21-Feb-2023		NANOPARTICULATE FIBRATE FORMULATIONS
USA	Allowed		11/802,542	US 2007-0298115 A1			21-Feb-2023	Alkermes Pharma Ireland Limited	NANOPARTICULATE FIBRATE FORMULATIONS
USA	APPEAL		11/802,567	US 2008-0095851 A1	23-May-2007		21-Feb-2023	Alkermes Pharma Ireland Limited	NANOPARTICULATE FIBRATE FORMULATIONS
USA	Published		11/979,230	US 2008-0138424-A1			21-Feb-2023	APIL & Fournier	NANOPARTICULATE FIBRATE FORMULATIONS
USA	Published		12/058,497	US 2008-0241070 A1				APIL & Fournier	NANOPARTICULATE FIBRATE FORMULATIONS
USA USA	Published	7 720 070 DO	11/367,716	US 2011-0027371 A1 US 2003-0232796 A1		27-Jul-2010	01-Oct-2018 03-Mar-2024	Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE STATIN FORMULATIONS & NOVEL STATIN COMBINATIONS NANOPARTICULATE POLYCOSANOL FORMULATIONS AND NOVEL POLYCOSANOL COMBINATIONS
USA	Granted Published	7,763,278 B2	10/457,811 12/704,426	US 2010-0143962 A1		27-JUI-2010		Alkermes Pharma Ireland Limiter	NANOPARTICULATE POLYCOSANOL FORMULATIONS AND NOVEL POLYCOSANOL COMBINATIONS NANOPARTICULATE POLYCOSANOL FORMULATIONS AND NOVEL POLYCOSANOL COMBINATIONS
USA	PENDING		10/784,900	US 2004-0229038 A1				Alkermes Pharma Ireland Limiter	NANOPARTICULATE MELOXICAM FORMULATIONS
USA	Published		12/788,203	US 2010-0297252 A1			24-Feb-2024	Alkermes Pharma Ireland Limited	NANOPARTICULATE MELOXICAM FORMULATIONS
USA	Published		10/705,227	US 2004-0156895 A1			12-Nov-2023	Alkermes Pharma Ireland Limited	SOLID DOSAGE FORMS COMPRISING PULLULAN
USA	APPEAL		10/619,539	US 2004-0258757 A1	16-Jul-2003		16-Jul-2023	Alkermes Pharma Ireland Limited	LIQUID DOSAGE COMPOSITIONS OF STABLE NANOPARTICULATE ACTIVE AGENTS
USA	Pending		13/044,450		09-Mar-2011			Alkermes Pharma Ireland Limited	LIQUID DOSAGE COMPOSITIONS OF STABLE NANOPARTICULATE ACTIVE AGENTS
USA USA	APPEAL Grapted	7 100 705 00	10/654,600	US 2004-0105778 A1		02 for 2007		Alkermes Pharma Ireland Limiter	GAMMA IRRADIATION OF SOLID NANOPARTICULATE ACTIVE AGENTS IN VITRO METUODS FOR EVALUATING THE IN VIVO EFFECTIVENESS OF DOSAGE FORMS OF
USA	Granted Granted	7,198,795 B2 7695739	10/323,736 11/650,412	US 2004-0029099 A1	20-Dec-2002 08-Jan-2007	03-Apr-2007		Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	IN VITRO METHODS FOR EVALUATING THE IN VIVO EFFECTIVENESS OF DOSAGE FORMS OF IN VITRO METHODS FOR EVALUATING THE IN VIVO EFFECTIVENESS OF DOSAGE FORMS OF
USA	Published	1080108	12/729,018	US 2010-0178648-A1				Alkermes Pharma Ireland Limited	IN VITRO RETHODS FOR EVALUATING THE IN VIVO EFFECTIVENESS OF DOSAGE FORMS OF
USA	Granted	7390505	10/766,960	US 2004-0258758 A1		24~un-2008	30-, an-2024	Alkermes Pharma Ireland Limiter	NANOPARTICULATE TOPIRAMATE FORMULATIONS
USA	Pending		13/189,299		22-Jul-2001		2/2/2024	Alkermes Pharma Ireland Limited	NOVEL FLUTICASONE FORMULATIONS
USA	Published		10/420,927	UŚ 2004-0105889 A1			14-Apr-2023	Alkermes Pharma Ireland Limited	LOW VISCOSITY LIQUID DOSAGE FORMS
USA	APPEAL		11/979,253	US 2008-0152585 A1				Alkermes Pharma Ireland Limited	LOW VISCOSITY LIQUID DOSAGE FORMS
USA	Granted	7842232	10/851,661	US 2010-0255102 A1		30-Nov-2010	29-Jun-2027	Alkermes Pharma Ireland Limited	STERILIZATION OF DISPERSIONS OF NANOPARTICULATE ACTIVE AGENTS WITH GAMMA RADIATION
USA	APPEAL		10/895,405	US 2005-0042177 A1				Alkermes Pharma Ireland Limiter	NOVEL COMPOSITIONS OF SILDENAFIL FREE BASE
USA USA	APPEAL Pending		10/697,703 13/193,545	US 2004-0156872 A1	31-Uct-2003 28-Jul-2011		5/18/2021	Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NOVEL NIMESULIDE COMPOSITIONS NOVEL NIMESULIDE COMPOSITIONS
USA	Published		12/292,092	US 2009-0074873 A1				Alkermes Pharma Ireland Limited	NANOPARTICULATE BECLOMETHASONE DIPROPRIONATE COMPOSITIONS
USA	APPEAL		10/697,716	US 2004-0141925 A1				Alkermes Pharma Ireland Limiter	NOVEL TRIAMCINOLONE COMPOSITIONS
USA	APPEAL		10/701,064	US 2005-0019412 A1				Alkermes Pharma Ireland Limited	NOVEL GLIPIZIDE COMPOSITIONS
USA	Published		10/712,259	US 2004-0115134 A1				Alkermes Pharma Ireland Limited	NOVEL NIFEDIPINE COMPOSITIONS
USA	Published		11/980,720	US 2009-0047209 A1	31-Oct-2007			Alkermes Pharma Ireland Limited	NOVEL NIFEDIPINE COMPOSITIONS
USA	Published		12/292,395	US 2009-0104273 A1			22-Jun-2019	Alkermes Pharma Ireland Limited	NOVEL NIFEDIPINE COMPOSITIONS
USA	Published	707744	10/677,857	US 2004-0101566 A1		A4 E 4 554	64 F./ ****	Alkermes Pharma Ireland Limiter	NOVEL BENZOYL PEROXIDE COMPOSITIONS
USA	Granted	7879360	10/978,695	US 2005-0238725 A1		01-Feb-2011		Alkermes Pharma Ireland Limiter	NANOPARTICULATE COMPOSITIONS HAVING A PEPTIDE AS A SURFACE STABILIZER
USA USA	Published Granted	7910577	10/979,792 11/274,887	US 2005-0147664 A1 US 2006-0154918 A1		22-Mar-2011		Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	COMPOSITIONS COMPRISING ANTIBODIES AND METHODS OF USING THE SAME FOR TARGETED INJECTABLE FORMULATIONS OF NANOPARTICULATE CLANZAPINE
USA	Pending	1910017	12/333,233	00 2000-013+310 AT	12-Nov-2008	44-1Mdl-7011		Alkermes Pharma Ireland Limiter	INANOPARTICULATE FORMULATIONS OF OLANZAPINE ESTERS
USA	Pending		13/024,315		09-Feb-2011			Alkermes Pharma Ireland Limited	INANOPARTICULATE FORMULATIONS OF OLANZAPINE ESTERS
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Country	Status	Number		er Publication Number		Date	Date	Owner	Short Title / Subject Matter
USA USA	APPEAL Pending		12/232,895 11/633,088	US 2009-0035366 A1			D.I. Don 2026	Alkermes Pharma Ireland Limited	NANOPARTICULATE BENZOTHIOPHENE FORMULATIONS NOVEL MCMETASONE COMPOSITIONS AND METHODS OF MAKING AND USING THE SAME
USA	APPEAL		11/377,650	US 2006-0210639 A1	04-Dec-2006 17-Mar-2006			Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE BISPHOSPHONATE COMPOSITIONS
USA	Published		11/376,554	US 2006-0210638 A1				Alkermes Pharma Ireland Limited	INJECTA3_E COMPOSITIONS OF NANOPARTICULATE IMMUNOSUPPRESSIVE COMPOUNDS
USA	Published		11/387,068	US 2006-0216353 A1				Alkermes Pharma Ireland Limited	NANOPARTICULATE CORTICOSTEROID AND ANTIHISTAMINE FORMULATIONS
USA	APPEAL		11/402,264		12-Apr-2006			Alkermes Pharma Ireland Limited	NANOPARTICULATE QUINAZOLINE DERIVATIVE FORMULATIONS
USA	APPEAL		11/402,257	US 2006-0246141 A1				Alkermes Pharma Ireland Limiter	NANOPARTICULATE LIPASE INHIBITOR FORMULATIONS
USA USA	APPEAL APPEAL		11/436,887 11/980,719		19-May-2006 31-Oct-2007			Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE INTEGRIN ANTAGONIST FORMULATIONS NANOPARTICULATE INTEGRIN ANTAGONIST FORMULATIONS
USA	APPEAL		11/437,833	US 2010-0028439-A1				Alkermes Pharma Ireland Limiter	NANOPARTICULATE STABILIZED ANTI-HYPERTENSIVE COMPOSITIONS
USA	Published		12/052,436	US 2008-0220074 A1				Alkermes Pharma Ireland Limiter	GAMMA RADIATION STERILIZED NANOPARTICULATE DOCETAXEL COMPOSITIONS AND METHOD OF
USA	APPEAL		11/363,266	US 2007-0202180 A1			28-Feb-2026	Alkermes Pharma Ireland Limited	NANOPARTICULATE CARVEDILO_FORMULATIONS
USA	Published		11/275,775	US 2007-0178051 A1				Alkermes Pharma Ireland Limited	STERILIZED NANOPARTICULATE GLUCOCORTICOSTEROID FORMULATIONS
USA	Published		12/071,849	US 2008-0152720 A1 US 2009-0252806 A1				Alkermes Pharma Ireland Limited	NANOPARTICULATE TACROLIMUS FORMULATIONS NANOPARTICULATE TACROLIMUS FORMULATIONS
USA USA	Published Pendina		12/484,073 13/039,249	US 2009-0202000 AT	02-Mar-2011			Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE TACROLIMUS FORMULATIONS NANOPARTICULATE BICALUTAMIDE FORMULATIONS
USA	APPEAL		11/361,055	US 2006-0188566 A1				Alkermes Pharma Ireland Limiter	NANOPARTICULATE FORMULATIONS OF DOCETAXEL AND ANALOGUES THEREOF
USA	Published		11/354,249	US 2006-0198896 A1				Alkermes Pharma Ireland Limited	AEROSOL AND INJECTABLE FORMULATIONS OF NANOPARTICULATE BENZODIAZEPINE
USA	Published		12/544,197	US 2009-0304801 A1			15-Feb-2026	Alkermes Pharma Ireland Limited	AEROSOL AND INJECTABLE FORMULATIONS OF NANOPARTICULATE BENZODIAZEPINE
USA	Published		11/325,626	US 2006-0165806 A1				Alkermes Pharma Ireland Limiter	NANOPARTICULATE CANDESARTAN FORMULATIONS
USA USA	APPEAL APPEAL		11/872,227 11/446,589	US 2006-0204588 A1				Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	FORMULATIONS OF A NANOPARTICULATE FINASTERIDE, DUTASTERIDE OR TAMSULOSIN NANOPARTICULATE BENIDIPINE COMPOSITIONS
USA	APPEAL		11/446,564	US 2007-0042049 A1 US 2006-0292214 A1				Alkermes Pharma Ireland Limited	NANOPARTICULATE ACETAMINOPHEN FORMULATIONS
USA	Published		11/446,565	US 2006-0275372 A1				Alkermes Pharma Ireland Limiter	NANOPARTICULATE IMATINIB MESYLATE FORMULATIONS
USA	APPEAL		11/448,984	US 2007-0059371 A1	08-Jun-2006		08-Jun-2026	Alkermes Pharma Ireland Limited	NANOPARTICULATE EBASTINE FORMULATIONS
USA	Pending		11/802,427		22-May-2007			Alkermes Pharma Ireland Limited	NANOPARTICULATE POSACONAZOLE FORMULATIONS
USA	APPEAL		11/481,257	110 0007 010 1700 11	06-Jul-2006			Alkermes Pharma Ireland Limited	NANOPARTICULATE CLARITHROMYCIN FORMULATIONS
USA USA	Published		11/520,059 11/520,058	US 2007-0104792 A1				Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE TADALAFIL FORMULATIONS INJECTABLE FORMULATIONS OF NANOPARTICULATE ARIPIPRAZOLE
USA	Published Pending		11/761,900	US 2007-0148100 A1	12-sep-2006 12-sun-2007			Alkermes Pharma Ireland Limiter	NANOPARTICULATE KINASE INHIBITOR FORMULATIONS
USA	APPEAL		11/775,002	US 2008-0213374 A1	09-Jul-2007			Alkermes Pharma Ireland Limiter	NANOPARTICULATE FORMULATIONS OF SORAFENIS TOSYLATE
USA	Pending		11/129,807		16-May-2005			Alkermes Pharma Ireland Limited	NANOPARTICLE DISPERSION CONTAINING LACTAM COMPOUND
USA	Pending		12/331,052		09-Dec-2008			Alkermes Pharma Ireland Limited	NANOPARTICULATE ANIDULAFUNGIN COMPOSITIONS AND METHODS FOR MAKING THE SAME
USA	Published		12/329,566	2009-0311335 A1	24-Feb-2009			Alkermes Pharma Ireland Limiter	COMBINATION OF A TRIPTAN AND AN NSAID
USA USA	Pending APPEAL		13/110,647 11/262,672		18-May-2001 31-Oct-2005			Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE CINACALCET COMPOSITIONS CONTROLLED RELEASE COMPOSITIONS COMPRISING A COMBINATION OF ISOSORBIDE DINITRATE AND
USA	Published		11/373,629	US 2007-0098791 A1				Alkermes Pharma Ireland Limiter	CONTROLLED RELEASE COMPOSITIONS COMPRISING A COMBINATION OF ISOSORBIDE DINTRATE AND
USA	Published		11/569,483	US 2008-0268043 A1				Alkermes Pharma Ireland Limiter	CONTROLLED RELEASE COMPOSITIONS COMPRISING AN ANTIPSYCHOTIC AGENT
USA	Published		11/329,893	US 2006-0269596 A1	11-Jan-2006		11-⊾an-202€	Alkermes Pharma Ireland Limited	CONTROLLED RELEASE COMPOSITIONS COMPRISING AN ACYLANILIDE
USA	Pending		11/568,841		29-Jun-2007			Alkermes Pharma Ireland Limited	CONTROLLED RELEASE COMPOSITIONS COMPRISING LEVETIRACETAM
USA	Pending		11/571,379	HO 0007 0400404 A4	12-Apr-2006			Alkermes Pharma Ireland Limiter	CONTROLLED RELEASE COMPOSITIONS COMPRISING A CEPHALOSPORIN FOR THE TREATMENT OF A
USA USA	APPEAL Pending		11/558,202 11/568,925	US 2007-01224B1 A1	16-Nov-2006			Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	MODIFIED RELEASE COMPOSITIONS COMPRISING A FLUOROCYTIDINE DERIVATIVE FOR THE TREATMENT MODIFIED RELEASE LOXOPROFEN COMPOSITIONS
USA	Published		11/422,226	US 2008-0118556 A1				Alkermes Pharma Ireland Limiter	MODIFIED RELEASE OF COMPOSITIONS CONTAINING A COMBINATION OF CARBIDOPA, LEVODOPA AND
USA	Granted	5505962	08/307,392		16-Sep-1994			Alkermes Pharma Ireland Limited	CONTROLLED RELEASE PHARMACEUTICAL FORMULATION
USA	Granted	5641745	08/479,509		07-⊾un-1995	24-Jun-1997	07-Jun-2015	Alkermes Pharma Ireland Limited	CONTROLLED RELEASE BIODEGRADABLE MICRO- AND NANOSPHERES CONTAINING CYCLOSPORIN
USA	Granted	5364620	07/921,459		28-Jul-1992	15-Nov-1994		Alkermes Pharma Ireland Limiter	CONTROLLED ABSORPTION DILTIAZEM FORMULATION FOR ONCE-DAILY ADMINISTRATION
USA	Granted	5616345	08/334,864		04-Nov-1994			Alkermes Pharma Ireland Limiter	CONTROLLED ABSORPTION DILITIAZEM FORMULATION FOR ONCE-DAILY ADMINISTRATION
USA USA	Granted Licensed	5336504 5370879	08/064,401 08/073,651		19-May-1993 07-Jun-1993	09-Aug-1994 06-Dec-1994		Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	DILTIAZEM FORMULATION AND METHODS OF TREATMENT FORMULATIONS AND THEIR USE IN THE TREATMENT OF NEUROLOGICAL DISEASES
USA	Licensed	5540938	08/328,165		24-Oct-1994	30-Jul-1996		Alkermes Pharma Ireland Limiter	FORMULATIONS AND THEIR USE IN THE TREATMENT OF NEUROLOGICAL DISEASES
USA	Licensed	5580580	08/479,506		07-⊾un-1995			Alkermes Pharma Ireland Limited	FORMULATIONS AND THEIR USE IN THE TREATMENT OF NEUROLOGICAL DISEASES
USA	Licensed	5533995	08/244,094		13-May-1994	09-Jul-1996		Alkermes Pharma Ireland Limited	PASSIVE TRANSDERMAL DEVICE WITH CONTROLLED DRUG DELIVERY
USA	Licensed	6066339	08/977,965		25-Nov-1997			Alkermes Pharma Ireland Limiter	ORA_MORPHINE MULTIPARTICU_ATE FORMULATION
USA USA	Licensed Licensed	6228398 6730325	09/566,636 09/850,425	US 2002-0054907 A1	08-May-2000 07 May 2001			Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	MULTIPARTICULATE MODIFIED RELEASE COMPOSITION MULTIPARTICULATE MODIFIED RELEASE COMPOSITION (METHYPHENIDATE
USA	Licensed	6902742	10/331,754	US 2003-0129237 A1				Alkermes Pharma Ireland Limited	MULTIPARTICULATE MODIFIED RELEASE COMPOSITION (METHYPHENIDATE)
USA	Licensed	6793936	10/354,483	US 2003-0170304 A1				Alkermes Pharma Ireland Limited	MULTIPARTICULATE MODIFIED RELEASE COMPOSITION (METHYPHENIDATE
USA	APPEAL		10/827,689	US 2004-0197405 A1	19-Apr-2004			Alkermes Pharma Ireland Limited	MULTIPARTICULATE MODIFIED RELEASE COMPOSITION (METHYPHENIDATE
USA	Published	7405100	11/372,857	US 2006-0240105 A1				Alkermes Pharma Ireland Limited	MULTIPARTICULATE MODIFIED RELEASE COMPOSITION (METHYPHENIDATE
USA USA	Granted Granted	7465462 7021163	09/744,169 10/492,098	US 2005-0003550 A1	19-Apr-2001 08-Apr-2004			Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	MULTIPARTICULATE CONTROLLED RELEASE SELECTIVE SEROTININ REUPTAKE INHIBITOR FORMULATIONS APPARATUS AND METHOD FOR CONCURRENTLY MONITORING ACTIVE RELEASE AND PHYSICAL
USA	Pending	1021100	12/626,001	US 2010-0003550 AT		0+тирт-2000	05-001-2022	Alkermes Pharma Ireland Limited	SUSTAINED RELEASE AMINOPYRIDINE COMPOSITIONS
USA	Pending		12/626,085	US 2010-0272796	25-Nov-2009			Alkermes Pharma Ireland Limited	SUSTAINED RELEASE AMINOPYRIDINE COMPOSITIONS
USA	Pending		12/626,036	US 2010-0272795				Alkermes Pharma Ireland Limited	SUSTAINED RELEASE AMINOPYRIDINE COMPOSITIONS
USA	Published		11/568,891	US 2010-0136106 A1			07∿un-202€	Alkermes Pharma Ireland Limiter	MODIFIED RELEASE FAMCICLOVIR COMPOSITIONS
USA	Published		11/569,481	US 2009-0297597 A1				Alkermes Pharma Ireland Limiter	MODIFIED RELEASE TICLOPIDINE COMPOSITIONS
USA United Stores	Pending Greated	110 5 044 745	13/044,225		09-Mar-2011		0 4~ 0010	Alkermes Pharma Ireland Limiter	ALCOHOL RESISTANT ENTERIC PHARMACEUTICAL COMPOSITIONS OF BIODECRADADILE MICRO, AND MANORE LEDES CONTAINING CYCLOSPODINI
United States USA	Granted Granted	US 5,641,745 6908626	08/479,509 10/268,928	US 2003-0137067 A1	11-0-4-2002	21, 10,2006		Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	CR BIODEGRADABLE MICRO- AND NANOSPHERES CONTAINING CYCLOSPORIN COMPOSITONS HAVING A COMBINATION OF IMMEDIATE RELEASE AND CONTROLLED RELEASE
USA	Pending	0300020	12/407,684	30 2003 010700; MI	19-Mar-2009	E CUITEUUU		Alkermes Pharma Ireland Limited	COMPOSITIONS FOR SITE-SPECIFIC DELIVERY OF IMATINIB MESYLATE AND METHODS OF USE
USA	Published		11/297,737	US 2006-0121112 A1				Alkermes Pharma Ireland Limiter	TOPIRAMATE PHARMACEUTICAL COMPOSITION
USA	Pending		11/571,977		14-Jan-2008			Alkermes Pharma Ireland Limited	CONTROLLED RELEASE COMPOSITIONS COMPRISING HETEROCYCLIC AMIDE DERIVATIVE
USA	Pending		11/568,698		03-Nov-2006			Alkermes Pharma Ireland Limited	NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING PROSTAGLANDIN
USA	Pending Published		11/569,206	He anno ancounc si	16-Nov-2006			Alkermes Pharma Ireland Limiter	NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING VITAMIN 42 NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING A CERUAL OSPORIM
USA USA	Published Published		11/568,825 11/568,835	US 2009-0269400 A1 US 2009-0297596 A1				Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING A CEPHALOSPORIN NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING A PLATELET
USA	Granted	5641515	08/474,161	SO EGOD GESTOSU MI	07-Jun-1995			Alkermes Pharma Ireland Limiter	CONTROLLED RELEASE BIODEGRADABLE NANOPARTICLES CONTAINING INSULIN
USA	Pending		11/671,276		06-Feb-2007			Alkermes Pharma Ireland Limited	NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING CEPDITOREN
USA	Published		11/672,263	US 2011-0008435 A1	07-Feb-2007			Alkermes Pharma Ireland Limited	NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING ARYL-HETEROCYCLIC

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USA	Published	Number	11/479,013	He onto ontrope At	2000 0000	Vale		Alkermes Pharma Ireland Limiter	NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING NILVADIPINE
USA	Published		11/776,770	US 2010-0247636 A1 US 2008-0317843 A1				Alkermes Pharma Ireland Limited	NANOPARTICULATE AND CONTROLLED RELEASE COMPOSITIONS COMPRISING MILVADIFINE NANOPARTICULATE FORMULATIONS OF MODAFINIL
USA	Published		12/049,046	US 2008-0226734 A1				Alkermes Pharma Ireland Limited	COMBINATION OF A NARCOTIC AND NON-NARCOTIC ANALGESIC
USA	Published		11/768,154	US 2008-0113025 A1				Alkermes Pharma Ireland Limited	COMPOSITIONS COMPRISING NANOPARTICULATE NAPROXEN AND CONTROLLED RELEASE
USA	Published		11/768,169	US 2008-0102121 A1				Alkermes Pharma Ireland Limited	COMPOSITIONS COMPRISING NANOPARTICULATE MELOXICAM AND CONTROLLED RELEASE
USA	Granted	5332113	07/758.364	00 2000 0102121 A1	10-Sep-1991	26-Sep-1994		Alkermes Pharma Ireland Limited	CAP ASSEMBLY
USA	Published	0002110	10/528,727	US 2006-0104909 A1		20 oop 1004		APIL & VERION INC	ABUSE-RESISTENT PHARMACEUTICAL COMPOSITIONS
USA	Pending		12/757.005	30 2000 010 1000 111	08-Apr-2010		EC 000 E0E0	Alkermes Pharma Ireland Limited	DRUG DELIVERY COMPOSITION (NANO OSMOTIC PUMP)
USA	Pendina		12/757,024		08-Apr-2010			Alkermes Pharma Ireland Limited	CONTROLLED-RE_EASE C_OZAPINE COMPOSITIONS
USA	Published		12/209,728	2009-0149479 A1	12-Sep-2008		12-Sep-2028	Alkermes Pharma Ireland Limited	DOSING REGIMEN
USA	Pending		12/397,924		04-Mar-2009			Alkermes Pharma Ireland Limited	STABLE LIQUID FORMULATIONS OF ANTI-INFECTIVE AGENTS AND ADJUSTED ANTI-INFECTIVE AGENT
USA	Published		12/788,196	US 2010-0316725 A1				Alkermes Pharma Ireland Limited	REDUCTION OF FLAKE-LIKE AGGREGATION IN NANOPARTICULATE ACTIVE AGENT COMPOSITIONS
USA	Granted	5242406	07/809,195		16-Dec-1991	07-Sep-1993		Alkermes Pharma Ireland Limited	DEVICE & METHOD FOR DISPENSING A LIQUID PARTICULARLY USEFUL FOR DELIVERING MEDICAMENTS
USA	Granted	5356632	07/759,006		12-Sep-1991	18-Oct-1994		Alkermes Pharma Ireland Limited	TRANSDERMAL DRUG DELIVERY DEVICE
USA	Granted	5380272	08/077,146		16-Jun-1993	10-Jan-1995	16-Jun-2013	Alkermes Pharma Ireland Limited	TRANSCUTANEOUS DRUG DELIVERY APPLICATOR
United States	Granted	US 5871125	08/697,692				5-Sep-2016	Alkermes Pharma Ireland Limited	Liquid delivery pumping device
USA	Granted	6312409	09/331,648		07-Sep-1999	06-Nov-2001		Alkermes Pharma Ireland Limited	DEVICE FOR GENERATING A PULSATILE FLUID DRUG FLOW
USA	Granted	6078842	997404		23-Dec-1997	20-Jun-2000	23-Dec-2017	Alkermes Pharma Ireland Limiter	IMPROVED ELECTRODE AND IONTOPHORETIC DEVICE AND METHOD
USA	Granted	6157858	08/997,388		23-Dec-1997	05-Dec-2000	23-Dec-2017	Alkermes Pharma Ireland Limited	DEVICE FOR THE DELIVERY OF A SUBSTANCE TO A SUBJECT AND IMP ROVED ELECTRODE ASSEMBLY.
USA	Granted	6317630	09/239,934		29-Jan-1999	13-Nov-2001	29-Jan-2019	Alkermes Pharma Ireland Limited	DRUG DELIVERY DEVICE
USA	Granted	D454,194 S	29/135,976		23-Jan-2001	05-Mar-2002	05-Mar-2016	Alkermes Pharma Ireland Limited	DRUG RECONSTITUTION AND INJECTION DEVICE
USA	Granted	6719719	09/863,539	US 2002-0004643 A1	23-May-2001	13-Apr-2004	23-May-2021	Alkermes Pharma Ireland Limited	SPIKE FÖR LIQUID TRANSFER DEVICE. LIQUID TRANSFER DEVICE INCLUDING SPIKE AND METHOD OF
USA	Licensed	5527288	08/183,482		18-Jan-1994	18-Jun-1996		Alkermes Pharma Ireland Limited	INTRADERMAL DRUG DELIVERY DEVICE
USA	Licensed	5997501	08/647,954		19-Aug-1996	07-Dec-1999	07-Dec-2016	Alkermes Pharma Ireland Limited	INTRADERMAL DRUG DELIVERY DEVICE
USA	Licensed	5814020	08/708,230		06-Sep-1996	29-Sep-1998	06-Sep-2016	Alkermes Pharma Ireland Limited	MEDICAMENT DELIVERY DEVICE
USA	Licensed	5858001	08/763,311		10-Dec-1996	12-Jan-1999	10-Dec-2016	Alkermes Pharma Ireland Limited	CARTRIDGE-BASED DRUG DELIVERY DEVICE
USA	Licensed	6261272	09/202,176		01~un-1999	17-Jul-2001	04~un-2017	Alkermes Pharma Ireland Limited	NEEDLE FOR SUBCUTANEOUS DELIVERY OF FLUIDS
USA	Licensed	6346095	09/778,332		06-Feb-2001	12-Feb-2002	04~un-2017	Alkermes Pharma Ireland Limited	NEEDLE AND METHOD FOR DELIVERY OF FLUIDS
USA	Licensed	6530900	09/577,033		23-May-2000	11-Mar-2003	05-May-2018	Alkermes Pharma Ireland Limited	SUBCUTANEOUS DRUG DELIVERY DEVICE WITH IMPROVED FILLING SYSTEM
USA	Licensed	6186982	09/072,875		05-May-1998	13-Feb-2001		Alkermes Pharma Ireland Limited	SUBCUTANEOUS DRUG DELIVERY DEVICE WITH IMPROVED FILLING SYSTEM
USA	Licensed	6500150	09/103,716		23-Jun-1998	31-Dec-2002		Alkermes Pharma Ireland Limited	PRE-FILLED DRUG-DELIVERY DEVICE AND METHOD OF MANUFACTURE AND ASSEMBLY OF SAME
USA	Licensed	6824529	09/836,105	US 2002-0010423 A1		30-Nov-2004		Alkermes Pharma Ireland Limiter	PRE-FILLED DRUG-DELIVERY DEVICE AND METHOD OF MANUFACTURE AND ASSEMBLY OF SAME
USA	Licensed	6843782	09/836,964	US 2001-0025168 A1		18-Jan-2005		Alkermes Pharma Ireland Limited	PRE-FILLED DRUG-DELIVERY DEVICE AND METHOD OF MANUFACTURE AND ASSEMBLY OF SAME
USA	Licensed	6275717	09/102,840		23-Jun-1998	14-Aug-2001		Alkermes Pharma Ireland Limiter	METHODS OF CALIBRATING AND TESTING A SENSOR FOR IN VIVO MEASUREMENT OF AN ANALYTE AND
USA	Licensed	6000548	09/102,841		23-Jun-1998	14-Dec-1999		Alkermes Pharma Ireland Limited	DRUG DELIVERY KIT AND METHOD OF PACKAGING THE SAME
USA	Licensed	6585707	09/315,629	US 2001-0056262 A1		01-Jul-2003		Alkermes Pharma Ireland Limited	IMPROVED ADHESIVE SYSTEM FOR MEDICAL DEVICES
USA	Licensed	6595956	09/275,464		23-Mar-1999	22-Jul-2003		Alkermes Pharma Ireland Limiter	IMPROVED DRUG DELIVERY DEVICE
USA	Licensed	7384413	10/461,040	US 2003-0236498 A1		10-Jun-2008		Alkermes Pharma Ireland Limited	DEVICE FOR MEASURING VOLUME OF DRUG
USA	Licensed		12/121,545		15-May-2008		23-Mar-2019	Alkermes Pharma Ireland Limited	IMPROVED DRUG DELIVERY DEVICE
USA	Licensed		13/184,479		15-Jul-2011			Alkermes Pharma Ireland Limiter	MPROVED DRUG DELIVERY DEVICE
USA	Licensed		13/184,473		15-Jul-2011			Alkermes Pharma Ireland Limited	IMPROVED DRUG DELIVERY DEVICE
USA	Licensed	6520941	09/415,961		12-Oct-1999	18-Feb-2003		Alkermes Pharma Ireland Limited	METHOD AND DEVICE FOR ENTRAPPING GAS WITHIN A LIQUID DRUG CONTAINER
USA	Licensed	7530964	09/883,025	07000	17-Jun-2001	12-May-2009		Alkermes Pharma Ireland Limited	NEEDLE DEVICE AND METHOD AND OPERATION THEREOF
USA	Licensed	6572740	08/832,179	27068	11-Apr-2001	03-Jun-2003		Alkermes Pharma Ireland Limited	ELECTROLYTIC CELL
USA	Granted	6759057	07/323,182		13-Mar-1989	06-Jul-2004		Alkermes Pharma Ireland Limited	METHODS AND COMPOSITIONS USING LIPOSOME-ENCAPSULATED NON-ST EROIDAL ANTI-INFLAMMATORY
USA USA	Granted Granted	5948441 5626873	08/367,923 08/442.080		03-can-1995	07-Sep-1999		Alkermes Pharma Ireland Limited	METHOD FOR SIZE SEPARATION OF PARTICLES NOVEL EMULSIONS
USA USA		5626878 5525232			16-May-1995	06-May-1997		Alkermes Pharma Ireland Limited	110 100 100 100 100 100 100 100 100 100
USA	Granted Granted		08/137,371		14-Oct-1993	11-un-1996		Alkermes Pharma Ireland Limited Alkermes Pharma Ireland Limited	METHOD FOR ENTRAPMENT OF CATIONIC SPECIES IN LAMELLAR VESIC LES
USA		5716526 5662930	08/599,869 08/433.665		12-Feb-1996	10-Feb-1998			METHOD OF SEPARATING MATERIALS FROM LIPOSOMES OR LIPID COMPLEXES REDUCTION OF LIPOSOME INDUCED ADVERSE PHYSIOLOGICAL REACTIONS
USA	Granted Granted	5662930 5614214	08/433,665 08/247,053		04-May-1995	02-Sep-1997 25-Mar-1997		Alkermes Pharma Ireland Limited	REDUCTION OF LIPOSOME INDUCED ADVERSE PHYSIOLOGICAL REACTIONS REDUCTION OF LIPOSOME INDUCED ADVERSE PHYSIOLOGICAL REACTIONS
			,		20-May-1994	49-Mgt-1997		Alkermes Pharma Ireland Limited	
USA	Granted	5,591,123	08/381,141					Alkermes Pharma Ireland Limited	Programmable control mounting system for transdermal drug applicate
USA	Granted	5,358,483	07/949,721					Alkermes Pharma Ireland Limited	Disposable transdemal drug applicator:
USA	Granted	5,372,579	08/204,784				13-Dec-2011	Alkermes Pharma Ireland Limited	Pulsating transdermal drug delivery syster



Case #: 000166.0051

Title: MICROENCAPSULATED 3-PIPERIDINYL-SUBSTITUTED 1,2-BENZISOXAZOLES AND 1,2-BENZISOTHIAZOLES

Owner: ALKERMES, INC. and JANSSEN PHARMACEUTICA

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	EPO	Granted	95900721.2	11-Nov-1994	0729357	2-Feb-2005	11-Nov-2014

Case #: 000166.0053

Title: PREPARATION OF BIODEGRADABLE MICROPARTICLES CONTAINING A BIOLOGICALLY ACTIVE AGENT

Owner: ALKERMES, INC.

Country	Sub Case Case Type		Status	Application #	Filing Date	Patent#	Issue Date	Expiration Date
Ireland	02	PCT	Granted	95 901 961.3	18-Nov-1994	0729353	06-Feb-2002	18-Nov-2014

Case #: 000166.0063

Title: PREPARATION OF EXTENDED SHELF-LIFE BIODEGRADABLE, BIOCOMPATIBLE MICROPARTICLES CONTAINING A BIOLOGICALLY ACTIVE AGENT

Owner: ALKERMES, INC. and JANSSEN PHARMACEUTICA

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	EPO/DIV	Granted	02075905.6	06-May-1997	1210942	21-Mar-2007	6-May-2017
Ireland	EPO	Granted	97923063.8	06-May-1997	0904063	4-Sep-2002	6-May-2017

Case #: 000166.0070

Title: METHOD FOR PREPARING MICROPARTICLES HAVING A SELECTED RELEASE PROFILE

Country	Sub Case Case Type		Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	00	EPP	Granted	99965212.6	10-Dec-1999	1140029	09-Nov-2005	10-Dec-2019

Case #: 000166.0073

Title: PREPARATION OF INJECTABLE SUSPENSIONS HAVING IMPROVED INJECTABILITY

Owner: ALKERMES PHARMA IRELAND LIMITED AND ALKERMES CONTROLLED THER APEUTICS, INC.

Country	Sub Cas	e Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	00	EPP	Granted	01928628.5	19-Apr-2001	1283699	06-Jun-2007	19-Apr-2021

Case #: 000166.0075

Title: APPARATUS AND METHOD FOR PREPARING MICROPARTICLES

Owner: ALKERMES, INC.

Country	Sub Case Case Type		Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	00	EPP	Granted	00991722.0	03-Nov-2000	1231898	27-Dec-2006	03-Nov-2020

Case #: 000166.0077

Title: PROCESS FOR ADJUSTING POLYMER MOLECULAR WEIGHT POLYMER MICROPARTICLES

Country	Sub Ca	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	00	EPP	Granted	01928630.1	19-Apr-2001	1282404	02-Jul-2008	19-Apr-2021

Case #: 000166.0098

Title: APPARATUS AND METHOD FOR PREPARING MICROPARTICLES USING IN-LINE SOLVENT EXTRACTION

Owner: ALKERMES, INC.

Country	Sub Cas	se Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	00	EPP	Granted	00990484.8	03-Nov-2000	1242053	12-Jan-2005	03-Nov-2020

Case #: 4000.3005

Title: Methods for Administering Aripiprazole

Country	Sub Case Case Type	Status	Application #	Filing Date	Patent #	Issue Date	Expiration Date
Ireland	EPP	Granted	04779411.0	29-Jul-2004	1660037	31-Aug-2011	29-Jul-2024